

# Synopses

OCTOBER 2004, ISSUE 29



## Part 1. Summaries from the 14th ANZSPD Biennial Conference 18-20 March 2004, Melbourne

### Behaviour management

#### Hug 'em the Australasian way

Communication between the dentist and the child is the key to success in dental appointments. Behavior management techniques are based on scientific principles, but the skill of the clinician to interpret the knowledge in this field is directly related to his/her success in treating children. Every practitioner has their own style of management depending on the environment, background, training and circumstances while treating a child. Various modalities of behavior management were discussed to allow the audience to reflect on their own management style. A video of a child receiving dental treatment was shown followed by constructive criticism of the techniques utilised by the clinician. Various suggestions were made for handling uncooperative children, as well as anxious or disruptive parents. Clinical cases of various children of different ages and severity of dental disease were discussed to recognise and effectively treat each situation on its own merit, ultimately building trust and allaying fear and anxiety.

Guidelines for behavior management included: voice control, 'tell show do' technique, positive reinforcement, distraction and nonverbal communication. Detailed explanations of these techniques can be found at [www.aapd.org](http://www.aapd.org).

Some helpful hints for dealing with

anxious children when taking difficult impressions include offering the child a finger print with some alginate material wrapped around his/her thumb. Distraction can also be achieved by instructing the child to move his limbs upon request, which is generally practised before the impression tray goes in the mouth ie: put your right hand up... followed by put your left knee up, etc. If the child has a high gagging reflex the tray needs to be loaded carefully with the minimum material required. Gagging can be also decreased with the use of topical anaesthetic in the soft palate prior the impression. It is helpful to take the impression early in the morning as the child will be more rested and cooperative, and suggest having breakfast after the appointment.

Emphasis was placed in the various methods of communication with parents and the child to clarify their feelings prior to commencement of treatment. It is important to leave the child with your assistant if you get angry during a treatment session, have a pause to reconsider a different strategy to deal with the uncooperative behaviour. A cardinal rule is to do nothing in the parent's absence that you would be uncomfortable doing in the parent's presence.

When utilising behavior management techniques, the clinician must evaluate the child's cooperation, weighing

#### THIS ISSUE

- 1-4 Behaviour management
- 2 President's Report
- 4-6 Preventative dentistry
- 6-9 Erosion
- 10 Hypoplasia and the first permanent molar
- 11 The Colgate ANZSPD postgraduate student research competition
- 12 Presentation by the winner of the 2003 postgraduate essay competition
- 13 14th ANZSPD Conference Report 18 – 20 March 2004
- 14 Pictures from the Conference
- 18 ANZSPD – Branch News 2004
- 20 ANZSPD Federal Secretary-Manager's Report
- 20 Recent visit by Dr Monika Suorn from Cambodia
- 21 Uniting Globally for Children
- 22 Congress Advertisements
- 23 Colgate Corner
- 24 Coming events

*Continued on page 3...*



## President's Report

This is my first 'Presidential' for Synopses.

Looking back, I can see that our Society has been well served by a series of effective Presidents and Federal Counsellors. The sixteen years since the Australian Society of Dentistry for Children and the New Zealand Society of Dentistry for Children amalgamated in 1988 to form the Australian and New Zealand Society of Paediatric Dentistry Incorporated has seen the Society grow and mature with the RK Hall lecturers, the outreach to our Pacific neighbours and Biennial Congresses which just seem to keep getting better and better. The recent Congress in Melbourne was a great success both scientifically and socially, and Melbourne itself turned on its best weather. Congratulations must go to Dr Chris Olsen, Dr Mala Desai, and the hard working Victorian Congress Organising Committee for bringing it all together. A sign, or maybe a consequence of the maturation of our Society has been the growth of our Congresses from cottage industry to professional conference organisers.

The 'pioneers' of our Society used to organise the Congresses by delegation to their office secretaries. As the Congresses have grown in both size and financial commitment, the use of professional conference organisers has become a necessity.

Because of the foresight of our Society since the last Adelaide Congress, the Federal Body has been able to budget seed funding for the forthcoming IAPD meeting, which we are hosting in Sydney from 31 October to 5 November 2005. In addition to this, some of the Branches have individually contributed additional funding to sponsor individual speakers for the meeting. I would certainly encourage any Branches that are still considering committing funds, to help support this important meeting. The IAPD 2005 Organising Committee, capably chaired by the omnipresent Dr Richard Widmer presented a progress report to the Federal Council in Melbourne. The IAPD 2005 meeting will have a strong scientific program entitled 'Frontiers of Paediatric Dentistry', and as at every one of our national Congresses, there will be a terrific social program. I am pleased to report that the conference organisers represented by Ms Deal have developed a sound business model for the meeting with a realistic break even attendance based on current confirmed sponsorship levels. For those branches still wavering on an individual sponsorship, the breakeven budget allows for a full refund of all promised seed funding. As additional sponsors are secured, the

financial position of this meeting will become even stronger. Over the next twelve months, there will be a lot of publicity for this meeting, but all members can assist by talking to their colleagues to raise awareness within the broader profession. If you're not sure who 'Anzi' is, or if you haven't visited the newly redesigned IAPD 2005 website, surf across to <http://www.iapd2005.com/> and have a look.

Speaking of websites, by the time you read this, our own website should be up and running at <http://www.anzspd.org.au/>. Drop in and have a look. If you have any feed back, ideas, or requests for content, click on the link to the webmaster to send an email, and help make the site a great professional and community resource.

I would finally like to acknowledge the contributions of our immediate past President, Dr Chris Olsen, the ubiquitous Dr Alistair Devlin who I hope will prove to be the Lifetime Honorary Federal Secretary Manager, and to Dr Karen Kan for her heroic efforts to maintain standards and publication schedules for Synopses. Of course Synopses would not be possible without the generous long term support of our major sponsor, Colgate Oral Care. We will definitely see bright smiles and a bright future.

*John Winters*



*John Winters (right) presenting the presidential jewel to Chris Olsen (Immediate Past President)*

*Continued from page 1...*

carefully the benefit and risk. When deciding how to treat a child, the clinician needs to consider the treatment required, consequences if deferral is considered, as well as potential physical and emotional trauma to the child. The decision to utilise complex behavior modification techniques must involve the parent (or legal guardian) and the clinician (and when appropriate the child). Informed consent is required in these cases and written documentation is essential. The legal guardian shares with the practitioner the decision whether to treat or not treat and must be consulted regarding treatment strategies and potential risks. Ultimately, it is important to build a trusting relationship between the dentist and the child, and to promote the child's positive attitude towards dental health.

*Dr Margarita Silva*

### Sedation: Is it possible in your practice and what are the rules?

The management of children's dental problems is at times both mentally and physically challenging.

Dentists have over the ages sought many means of treating children in a successful and safe manner. Various forms of sedation have evolved to provide ease of access for the dentist and assist with cooperation of the child. Sedation or general anaesthesia for paediatric dental care has a long history.

Poor publicity and a number of deaths of patients undergoing dental procedure with a sedating agent, has made both the public and medical/dental community aware of the need to dispense sufficient information to both parents and practitioners. The Internet being a great source of 'information and misinformation' can often be an extremely adverse source of publicity for the health practitioners. All practitioners should be equipped to deal with, in a very informed manner, with any patient/parent who requires increased information prior to undertaking any form of treatment plan for their child.

There are a number of forms of sedation available to the dentist to assist with the management of children.

1. *Inhalational sedation:* nitrous

oxide is useful as a safe and effective sedating agent. When nitrous oxide is employed as a sedating agent, one must ensure that there are good scavenging facilities available.

2. *Oral Sedation:* Can be used by any practitioner as long as they have experience and are fully aware of the side effects of any oral sedative used. The use of oral midazolam is proving to be quite effective however this must be used carefully and in a safe environment.
3. *Intravenous sedation:* the use of intravenous sedating agents mainly involves some form of cocktail of drugs. These can include Midazolam, Alfentanyl/Fentanyl and/or Propofol. It is recommended that when using intravenous sedation, the surgery should be fully equipped with resuscitation and monitoring equipment. The services of a pediatric-trained anesthetist should be employed in conjunction with full anaesthesia and recovery staff.
4. *General anaesthesia:* the admission of a patient for treatment under general anaesthesia is often the ultimate solution to treatment. A general anaesthetic for a pediatric patient should be performed in a fully equipped operating theatre. General anaesthetics should not be performed in a dental practice.

The main concern with the management of children under sedation is to provide a safe environment. *Cote et al* (Pediatrics 2000) looked at a number of adverse pediatric events for children undergoing sedation procedures; this included all forms of sedation. A significant number of deaths due to dental treatment in children were reported, mostly due to lack of understanding of the drugs, over use of drug cocktails, and also lack of monitoring and resuscitation equipment.

Hence it is important that when administering any form of sedation to children that there is adequate resuscitation equipment and recovery staff. Sedation should be used as an adjunct to treatment planning. The main goal of managing children is communication with the child and the parent so all parties are happy with the

proposed treatment plan and the means of achieving the treatment plan.

*Dr Peter Wong*

### Anaesthesia and paediatric dental cases

The perioperative management of children undergoing dental procedures can be very challenging. Once the decision to perform dental procedures under anaesthesia has been made the following issues need to be considered.

#### Risks of anaesthesia

Australia is one of the safest places in the world to undergo anaesthesia. In the period 1997-1999 there was approximately 1 death per 80,000 anaesthetics. The majority of these were in elderly and seriously ill patients. It is difficult to give a true risk of death for healthy children undergoing elective surgery, but it is probably less than 1 in 250,000.

In children the most common cause of serious complications are 'airway events'. These may include failure to adequately manage the airway, bronchospasm, laryngospasm and aspiration. Risk factors for such events are an inexperienced anaesthetist, intercurrent respiratory tract infection, asthma and an unfasted patient. Primary cardiac arrest, malignant hyperthermia and anaphylaxis are much rarer causes of serious morbidity.

#### Preoperative challenges

Thorough assessment and preparation of patients can reduce the incidence of anaesthetic complications.

Important historical information includes family history or past history of anaesthesia complications, severe or intercurrent asthma and recent upper respiratory tract infection.

Conditions that may warrant referral to a tertiary paediatric centre for specialist paediatric anaesthesia includes congenital heart disease, severe or uncontrolled asthma, congenital muscle disease, craniofacial syndromes, severe developmental delay and autism.

#### Intraoperative challenges

Often, the main challenge to the anaesthetist and dentist in paediatric dental cases is the sharing of the airway. This occasionally leads to disputes!



It is an important issue as a secure airway must be provided in order to allow adequate ventilation and oxygenation and prevent aspiration of blood, pus or, rarely, teeth.

There are a variety of options of airway available including: face mask, oral endotracheal tube, nasal endotracheal tube and laryngeal mask airway.

In children there are few contraindications to nasal intubation, however, it should be avoided in those who have a bleeding disorder and those who may be difficult to intubate.

A good understanding between surgeon and anaesthetist is essential in any shared airway case as problems often occur and should be managed promptly.

#### Postoperative challenges

Pain from oral surgery is usually not severe. The mainstay of analgesia remains paracetamol, ideally given as a loading dose preoperatively. Codeine is also a useful paediatric analgesic however, it has a variable effect from patient to patient. Non steroidal antiinflammatory drugs are also useful particularly for patients with bone pain.

Post operative nausea and vomiting (PONV) has long been under recognised in children, with up to 50% of all patients affected. The aetiology of PONV is multi-factorial - it is not simply a case of anaesthesia making patients sick. Many strategies have been shown to be effective in preventing and treating PONV. Not all strategies involve medication.

The provision of safe anaesthesia for paediatric dental surgery requires thorough patient assessment and preparation. A good understanding between dental surgeon and anaesthetist is essential to avoid both major and minor complications.

*Dr Rob McDougall*

*Specialist Paediatric Anaesthetist*

## Preventive dentistry

### New modalities for a new generation: casein phosphopeptide-amorphous calcium phosphate, a new remineralisation technology

Dental caries is the localised destruction of tooth tissue by specific dental plaque bacteria that ferment dietary sugar to organic acids. Even though in most developed countries the prevalence of dental caries has decreased through the use of fluorides, the disease remains a major public health problem. A substantial volume of literature now exists demonstrating an anticariogenic effect of dairy products [milk, milk concentrates, powders and cheeses]. This anticariogenic effect has been attributed to the multiphosphoryl-containing sequences of casein. These sequences can be released as casein phosphopeptides (CPP) from an enzymatic digest of casein. The CPP have a remarkable ability to stabilise calcium phosphate in solution as amorphous calcium phosphate (ACP) nanocomplexes. Through their multiple phosphoryl residues, the CPP bind to ACP in metastable solution preventing their growth to the critical size required for nucleation and phase transformation to an insoluble crystalline calcium phosphate. NMR conformational and binding studies have shown that CPP phosphoryl residues are essential for ACP interaction. The casein phosphopeptide-amorphous calcium phosphate nanocomplexes (CPP-ACP) have been shown to localise at the tooth surface and prevent enamel demineralisation in laboratory, animal and human *in situ* trials. The CPP-ACP have also been shown to remineralise enamel subsurface lesions *in situ* when delivered in oral care products. The proposed anticariogenic mechanism for CPP-ACP is the localisation of ACP at the tooth surface which buffers the free calcium and phosphate ion activities, thereby helping to maintain a state of supersaturation with respect to tooth enamel, preventing demineralisation and enhancing remineralization. The CPP-ACP interact with fluoride ions to produce an amorphous calcium fluoride phosphate stabilised by the CPP at the tooth surface. This provides soluble calcium, fluoride and phosphate ions to promote

remineralisation with fluorapatite that is more resistant to future acid challenge. Oral care products containing CPP-ACP (Recaldent™) are now commercially available in Australia, USA, Europe and Japan.

*Professor Eric Reynolds*

*Centre for Oral Health Science, School of Dental Science, The University of Melbourne*

### Fluoride symposium: Getting the fluoride balance right: children in long term fluoridated communities

Appropriate fluoride intake in children in long-term fluoridated communities should maximise caries prevention while at the same time avoiding dental fluorosis. Community water fluoridation (CWF) remains one of the best public health bargains, costing Australians approximately 50 cents per person per year. Dental Health Services Victoria (DHSV) estimates that over \$1 billion has been saved in dental expenses in the last 25 years in Melbourne, since the introduction of CWF. Other notable anniversaries of CWF in Australian communities have occurred recently: Beaconsfield, Tasmania (50th), Canberra and Hobart (40th), Sydney and Perth (35th), Adelaide and Darwin (31st). The exception to this list of cities is Brisbane, which remains non-fluoridated. Approximately 65% of the Australian population now live in areas supplied with CWF. Nonetheless, new fluoridation proposals face strong reaction, with media often highlighting minimal risk ahead of overwhelming dental benefits.

As a result of CWF, dental caries has reduced dramatically in Australian children and adolescents. For example, DHSV reports that the average 6 year-old child in non-fluoridated Victoria has 40% more decayed teeth than the average 6 year-old in fluoridated Victoria, and even greater gains have been made in reducing the caries experience in adolescents. However, the prevalence of early childhood caries (ECC) continues unabated. Recent Australian studies indicate that ECC is predisposed by enamel defects, sleeping with a nursing bottle and low family income. Also disturbing

*"...daily brushing with fluoride toothpaste with spitting but not rinsing achieves the best caries reduction."*

following marked declines, reports indicate an increase in caries nationally in 5-6 year-olds over the period 1996 to 1999. Australia-wide data collected by the Dental Statistics Research Unit (University of Adelaide) and reported in 2003, describe increases in decayed teeth of 22% among 5 year-olds and of 8% among 6 year-olds; the greatest caries experience is now concentrated in 10% of 6 year-olds. It is speculated that fluoridated communities may be becoming complacent, the profession may have over-reduced topical fluoride exposure, or the community may be consuming too much non-fluoridated water such as from bottled sources (which may contain less than 0.1 mgF/L). Consumers using bottled water in fluoridated communities *may* be losing out on the benefits of fluoride, but there is no evidence so far on the relative contribution of bottled water.

The discretionary fluoride sources for children are multiple and possible risk factors for fluorosis include infant formulas, ingested fluoride toothpastes and fluoride supplements. Fluorosis on a community basis should be controlled by reducing the discretionary sources of fluoride rather than by reducing CWF. The effects of fluoride on forming enamel are cumulative, depending on total fluoride intake and duration of exposure. The fluoride intake for a child at age 22-36 months is significant for anterior fluorosis, as ameloblasts appear particularly susceptible to fluoride-induced change during early enamel maturation. Compliance with supplement usage is variable and the efficacy in caries prevention has been challenged. Due to national distribution of foodstuffs, products manufactured in fluoridated areas are transported widely and non-fluoridated communities receive some fluoride benefit. Fluoride supplementation is now an individual decision made by the dentist for high-risk children based upon the caries risk, age of the child, and other sources of fluoride.

Can children with low caries experience and using fluoride toothpastes still benefit from topical gel applications? Anecdotal reports suggest diminished benefits on a population basis, and the only evidence is extrapolated from higher caries populations where gel applications have been very useful in moderate to high risk patients. A recent report on 4-5 year-old children residing

in a low fluoride community and followed for four years with twice-yearly gel applications showed statistically (but not clinically) significant caries reductions in first permanent molars. Acidulated gels should be avoided for patients with erosion or xerostomia, or with restorations of composite resin, glass ionomer cement or porcelain; neutral gels should be used in such cases.

Due to possible swallowing, fluoride rinses should be used only after the eruption of the permanent incisors. Such products can be valuable for children unable to brush, at high caries risk, or experiencing increased caries susceptibility (eg. during orthodontic treatment). Due to slow release and high fluoride concentration, varnishes have the potential for toxicity and careful case selection is essential. Varnishes are useful for hypersensitive areas, for local remineralisation of white spot lesions, on newly-erupted teeth, and in high-risk patients and those in high-risk categories.

In order to avoid any swallowing of adult strength toothpastes, children should use a pediatric toothpaste (400 or 500 ppmF; either NaF or NaMFP) until after the permanent incisors erupt. Parents should be shown how to read toothpaste labels, as manufacturers may package adult strength toothpastes in tubes decorated with children's motifs. Parents should brush and floss for their child until about 7 or 8 years of age and supervise 'play brushing'. A pea-size amount of low fluoride toothpaste should be smeared sideways across the brush head for young children; brushing twice daily can significantly reduce caries in two year-olds and teaching preschoolers to "swish and pump" the toothpaste between the teeth can also reduce caries. Two recent, large evidence-based studies concluded that the effectiveness of a fluoride toothpaste was increased by supervised brushing, higher baseline DMFS, higher fluoride concentration and higher frequency of use, but was unaffected by exposure to fluoridated water.

There are new challenges today in achieving the correct balance for fluoride utilisation in long-term fluoridated communities, and there is no room for complacency concerning caries reduction. All fluoride products need supervision, both in the dental practice and at home. Possibilities exist for the incorporation of fluoride into

new caries-preventive modalities containing casein phosphopeptide-amorphous calcium phosphate and initial laboratory studies and clinical trials show promising results.

*Professor Louise Brearley Messer*

### Optimising the fluoride effect in preventing dental caries

In more recent years the mechanisms of fluoride action on enamel have become clearer. The main actions of fluoride in decreasing enamel demineralisation and enhancing enamel remineralisation support the logical choice of fluoride products for each patient that will have the best effect. In order to achieve the optimum effect, each patient should first have their dental caries risk and fluoride history determined. The caries risk should include previous caries, signs of early lesions, sites of dental plaque and dietary factors. The fluoride history should look at all the fluorides which are available to the patient. Although recent studies have suggested that the caries reduction with water fluoridation is not as great as in the past, it is important to realise that the early studies measured one source of fluoride – that in water. In current studies, study subjects in both fluoridated and non fluoridated areas will **already** have the effect of fluoride toothpaste which is between 20 and 30 percent reduction. The effect of water fluoridation on top of that would only be expected to be in the range of 20-30 percent to meet the total 50-60 per cent reduction that fluorides appear to be able to achieve. Thus the fluoride effect is almost undoubtedly as great as shown originally.

In optimising the effect of fluorides, the vehicles chosen must be the most useful for individual patient needs. Water fluoridation is a most efficient way to deliver fluoride. Where water fluoridation is not possible or not optimal, other vehicles can achieve good benefits. Evidence would suggest that daily brushing with fluoride toothpaste with spitting but not rinsing achieves the best caries reduction. In addition, for very high risk a fluoride mouthwash may be added and professional fluoride treatments. When gels or varnishes are being chosen, it is important to remember that the studies reporting the caries reduction have involved whole mouth treatments. When used on single teeth, they cannot

be expected to have the same overall caries reduction. A further issue is that of how fluoride actually achieves the drop in dental caries. This only occurs with optimum calcium and phosphate available. Therefore to optimise the effect of the fluoride that is used, it is critical to make sure that the salivary function is within normal limits and if not to consider use of casein phosphopeptide-amorphous calcium phosphate products to decrease the rate of demineralisation and increase the rate of remineralisation. Fluoride on its own cannot do either. Fluoride provides excellent preventive benefits at all ages and its appropriate use should be considered in every treatment plan.

*Dr Bernadette Drummond*

*Both Professor Eric Reynolds and Professor Louise Brearley Messer's articles will be published in the next issue of Synopses.*

## Erosion

### Erosion symposium: Is my child at risk? Diagnosis and prevention and oops how do I restore it?

This paper is a summary of the presentation given at the 14th Biennial Conference of the Australian and New Zealand Society of Paediatric Dentistry in Melbourne, March 2004. It is not intended to be a comprehensive manuscript on dental erosion. For further information the reader is referred to several review papers recently published in peer reviewed journals (Shaw and Smith 1998, Chu et al. 2002a-d, Mahoney and Kilpatrick 2003, Kilpatrick and Mahoney in press) Wilson NM, Charette L, Thompson AH and Silverman M (1985). Gastro-oesophageal reflux and childhood asthma: the acid test. Thorax 40: 592-597.

### Introduction

Tooth wear is a multifactorial process that is thought to be the result of a combination of erosion, attrition, abfraction and abrasion (Milosevic 1988). Erosion is defined as a chronic localised loss of dental hard tissue chemically etched away from the tooth surface without bacterial involvement and is a particular problem for children as the enamel and dentine layers in the primary dentition are much thinner than the permanent dentition (Pindborg 1970). Once dentine is exposed further loss of tooth tissue either due to erosion or any other tooth wear process tends to accelerate. There is some evidence that the prevalence of erosion is increasing with up to 80% of primary incisors showing some evidence of erosive tooth tissue loss (Millward et al. 1994). In older children up to 30% of 14 year old adolescents have been found to have dentine exposed due to erosion (Milosevic A et al. 1994). In National Dental Survey in the United Kingdom, in 1993 27% of 15 year olds had palatal wear of their upper incisors with 2% extending into the pulp (O'Brian 1993).

The appearance of dental erosion is very typical with loss of the luster from the surface enamel, thinning and chipping of the upper incisors (*Figure 1*) (*left*), posterior restorations standing proud, smooth exposed dentine and pulpal exposure.

### Aetiology

The aetiology of dental erosion is undoubtedly multifactorial but can be classified as either extrinsic (acids derived from external sources) or intrinsic (acids derived from the stomach contents). *Table 1* summarises the multiple potential causes of dental erosion. Dietary causes of dental erosion are likely to be the most common [*cause of dental erosion (ed.)*] with many foods and drinks being implicated. It is important to note that it is not only the pH which determines the erosive potential of a substrate but also its titratable acidity and its Calcium, Phosphate and Fluoride content. In addition there are a number of confounding factors that will influence the erosive potential; these include the frequency and timing of intake, the mode of ingestion, oral hygiene habits and individual salivary flow and quality.

Given the high prevalence of asthma in Australia and New Zealand the association between asthma and dental erosion is of note. Shaw and colleagues (2000) found that 14 year-old adolescents with asthma not only had significantly more erosion but it was of greater severity than adolescents without asthma (O'Sullivan EA & Curzon 1998). It is possible that children with asthma may also experience more gastro-oesophageal reflux which may further contribute to the tooth tissue loss (Wilson NM et al. 1985). More recently the use of recreational drugs has been associated with tooth tissue loss (Milosevic et al. 1999).

### Management

The most important aspect of the management of erosion is early diagnosis. Whilst it is important to treat any acute dental sensitivity or pain resulting from the tooth surface loss it is also essential to establish the aetiology, where possible to eliminate the cause and to instigate proactive preventive strategies. As in the management of dental caries, the restorative/surgical approach is likely to be relatively ineffective if the aetiological factors persist. A full history and examination is essential to identify the underlying cause (Watson and Tulloch 1985). The medical history

*Figure 1*



Table 1. Aetiology of dental erosion

Extrinsic	Intrinsic
Dietary <ul style="list-style-type: none"> <li>- citrus fruits and juice</li> <li>- carbonated drinks (inc 'diet' products)</li> <li>- sports drinks</li> <li>- wine</li> </ul>	Gastric reflux
Environmental/occupational <ul style="list-style-type: none"> <li>- battery manufacturing</li> <li>- swimming</li> <li>- elite athletes</li> </ul>	Eating disorders <ul style="list-style-type: none"> <li>- bulimia nervosa</li> </ul>
Lifestyle <ul style="list-style-type: none"> <li>- recreational drugs</li> </ul>	Pregnancy <ul style="list-style-type: none"> <li>- morning sickness</li> </ul>
Medication <ul style="list-style-type: none"> <li>- aspirin</li> <li>- Vit C</li> <li>- Asthma medications (powdered form)</li> <li>- PKU supplements</li> <li>- Certain mouthwashes</li> </ul>	Rumination

Table 2. Prevention of erosion

Reducing acid exposure	<ul style="list-style-type: none"> <li>- Inform patients of types of foods and drinks that have greatest erosive potential</li> <li>- Consumption of still/non-carbonated drinks as an alternative</li> <li>- Limiting the intake of acidic foods/drinks to meal times</li> <li>- Decrease time taken to consume acidic drinks ie. not holding carbonated drinks in mouth, reducing sipping habits</li> <li>- Advocate consumption of a neutral food immediately after a meal eg. cheese</li> <li>- Rinsing mouth out after acid exposure ie. after episode of vomiting</li> <li>- Avoid brushing teeth for at least 60 minutes after acid exposure (extrinsic or intrinsic causes)</li> </ul>
Optimising salivary function	<ul style="list-style-type: none"> <li>- Increased water intake</li> <li>- Use of water bottles in school bags</li> <li>- Use of water dispensers or water jugs in work environment</li> <li>- Avoiding caffeine and alcohol containing products</li> <li>- Advise use of sugar free chewing gum to enhance salivary flow</li> </ul>
Enhancing resistance to erosion	<ul style="list-style-type: none"> <li>- Advise the use of a neutral fluoride mouthwash or gel</li> <li>- Advise use of Recaldent® Chewing Gum to optimise salivary flow and enhance remineralisation</li> <li>- Apply Tooth Mousse® to enhance remineralisation and reduce sensitivity</li> </ul>

should include the frequency of intake of any medications, the vehicle by which these are consumed (liquid or powders) and any vitamin supplementation. A social history should include a record of the place of work, frequency of consumption of alcoholic beverages and any recreational activities (such as swimming). A series of questions about diet should be included either as a questionnaire or verbally. It is important to question each patient on the frequency of intake of acidic foods and beverages and the way that these are consumed. Determining the frequency of use of oral hygiene products and the possibility of gastroesophageal reflux must also be determined. The latter is often difficult to establish but a history of heart burn, a nasty taste in the mouth or frequent burping may assist in the diagnosis. If in doubt then referral to a gastroenterologist may well be indicated. The management of tooth wear relies on the patient understanding the condition so they can provide sufficient information to allow the clinician to arrive at a differential diagnosis (Smith et al 1997). In some instances patients may not volunteer sensitive information (such as an eating disorder) when initially questioned (Chu et al 2002a). It may take several visits before the underlying cause becomes evident.

A thorough examination including study models and intra-oral photographs is recommended to ensure that the progression of erosion can be monitored.

### Prevention

Table 2 summarises some general preventive strategies that can be adopted irrespective of the aetiology of the erosive process. Essentially the measures fall into two groups those that reduce the acid exposure (ie. dietary counseling), or enhancing the ability of the oral cavity to resist the effects of the acidic environment (eg. increasing salivary flow). Promoting the increased intake of water is a very positive message that the dental profession can and should promote in line with general nutritional guidelines (Moynihan 2002). This will not only reduce the acid exposure but also promote hydration and thus optimise salivary function.

The role of topical fluoride in the prevention of dental erosion remains



unclear (Larsen 2001, Ganss et al 2001, Larsen and Richards 2002). The application of a topical fluoride creates a layer of calcium fluoride on the tooth surface which serves as a fluoride reservoir promoting the formation of fluorhydroxyapatite which is less soluble than hydroxyapatite. It is possible that the very high concentrations of acid seen in erosion actually dissolve the residual layer of calcium fluoride thereby minimizing its effect. However the use of neutral topical fluoride is currently still considered a useful strategy in the prevention of dental erosion despite mixed evidence on its effectiveness. An alternative approach to increasing the resistance of enamel to dissolution is the application of CPP-ACP. Casein Phosphopeptide-Amorphous Calcium Phosphate acts as a reservoir for calcium phosphate, maintaining a state of supersaturation with respect to calcium and phosphate thereby depressing enamel demineralization and increasing remineralisation (Reynolds 1998). CPP-ACP is currently available in two forms; a sugar free chewing gum (Recaldent: Cadbury Japan Limited, Adams Division) and a topical application cream known as Tooth Mousse (GC Corporation, Itabashi-ku, Tokyo, Japan). Neither of

*“In the young person any restorative technique should be minimally invasive...”*

these products have yet been shown to be effective in preventing dental erosion clinically however the use of the chewing gum has been shown to result in significant remineralisation *in vitro* (Shen et al 2001). These products may well offer significant advantages in the prevention and management of dental erosion particularly when used with topical fluoride as the effects of each are said to be synergistic resulting in the enhanced localisation of fluoride at the tooth surface (Reynolds 1998).

### Treatment

Having established the aetiology and implemented some general preventive measures, a decision is required as to the need to restore the dentition. This decision may even have to be made in the absence of a firm diagnosis as this can in some cases be difficult to obtain. Restorative intervention may be required when there is ongoing uncontrolled tooth tissue loss, when

there is pathological destruction of the dentition including pulpal exposure and where there is an aesthetic problem.

Treatment can be considered in three phases; immediate, definitive and long term. In addition to the preventive strategies outlined above the immediate phase of treatment should also include management of any acute dental sensitivity. Dental erosion is often not associated with much pain or sensitivity particularly when it has been occurring over the long term. However in some cases acute sensitivity to intra-oral temperature changes is reported. The use of products such as Gel Kam<sup>®</sup>, NeutroFlur 5000<sup>®</sup> or Tooth Mousse<sup>®</sup> applied topically to the sensitive exposed dentine can bring about relief in the matter of a few weeks. However the placement of a simple glass ionomer material in the form of a thin sealant often provides immediate relief of pain and allows the clinician to make a

Table 3. summarises the treatment options for the management of dental erosion

Material	Advantages	Disadvantages	Durability
Cast metal (nickel/chrome or gold)	Fabricated in thin section – require only 0.5mm space. Very accurate fit possible Does not abrade opposing dentition Protective of residual tooth structure	May be cosmetically unacceptable due to 'shine through' of metallic grey Cannot be simply repaired or added to intra-orally Suitable for posterior restorations in parafunction Multiple appointments required	Success rate of 89% for palatal veneers over 4.5 years (n = 210) (Nohl et al 1997)
Composite – direct	Least expensive May be used as a diagnostic tool Can be added to and repaired relatively simply intra-orally Aesthetically superior to cast metal Single appointment	Technically difficult for palatal veneers Limited control over occlusal and interproximal contour Requires min of 1.0mm space Possible inadequate wear resistance for posterior use	Success rate of 86% for labial veneers over 3 years (n = 289) (Welbury 1991)
Composite – indirect	Can be added to and repaired relatively simply intra-orally Aesthetically superior to cast metal Control over occlusal contour and vertical dimension	Inferior marginal fit May be bulky Possible inadequate wear resistance for posterior use Requires at least two appointments Expensive	Success rate of 96% for palatal veneers over 2 years (n = 75). (Gow and Hemmings 2002)
Porcelain	Best aesthetics Good abrasion resistance Well tolerated by gingival tissues	Potentially abrasive to opposing dentition Brittle should be used in bulk Hard to repair	Multiple studies suggest a success rate in excess of 90% over 5+ years (Aristidis and Dimitra 2002, Dumfahrt and Schaffer 2000)



differential diagnosis as to the nature of the problem. This sealant will remain in situ for at least a few weeks during which time a more definitive plan can be drawn up.

Treatment should be aimed at restoring the missing tooth structure (following the principles of minimal intervention), preventing further tooth tissue loss and maintaining a balanced occlusion. In the young person any restorative technique should be minimally invasive and hence an adhesive approach is preferred. It should be aesthetic particularly when replacing missing tooth tissue from the anterior part of the mouth but must also be durable and where possible repairable. Particularly in those cases of dental erosion caused by intrinsic factors such as an eating disorder there is a strong likelihood that the erosive process will not be completely eliminated and that relapse and further tooth tissue loss will occur. It is therefore advantageous that any restorative solution used to replace missing tooth tissue can be repaired and supplemented should further erosive tissue loss occur.

Table 3 summarises the various restorative options available for replacing missing tooth tissue. Irrespective of the material chosen to restore the lost tooth tissue maintenance of a balanced occlusion is important. In some cases of tooth surface loss there is compensatory growth of the alveolar bone which helps to maintain the occlusal vertical dimension. At the same time if this does occur there will be insufficient space to place the restorations and so space has to be created. The creation of space should be done with minimal tooth tissue loss. Methods available include orthodontic tooth movement, changing the occlusal vertical dimension and tooth preparation. Controversy does still exist over the risks associated with encroaching into the interocclusal space. However recently it would appear that providing a balanced occlusion is maintained, increases in vertical dimension can be tolerated particularly by young patients in whom marked changes occur naturally throughout adolescence and into early adulthood (Rivera-Morales et al 1991, Hunter and Stone 1997, Hemmings et al 2000, Dyer et al 2001, Redman et al 2003).

Long term review is recommended for all patients with tooth surface loss. This provides an opportunity for the

dentist to monitor future tooth surface loss, maintain the existing restorations and to provide support for the patient. Individuals with eating disorders in particular are prone to periods of relapse and the dentist is in an ideal position to diagnose these periods. The dentist can develop a special and trusting relationship with the young patient over the longer term which is based not simply on seeing the patient when they are 'ill' and therefore to admonish them, but also when they are well to support and encourage them. Similarly patients with dietary erosion need constant reinforcement and support to maintain dietary change.

### Acknowledgements

The authors would like to thank Dr Erin Mahoney for her help in sourcing the evidence base for this lecture. They would also like to acknowledge the Editor of the New Zealand Dental Journal for his permission to reproduce the tables used in this summary.

Dr Nina Vasan, Dr Peter Readman and Associate Professor Nicky Kilpatrick

### References

- Aristidis GA and Dimitra B (2002). Five year clinical performance of porcelain laminate veneers. *Quintessence International* 33: 185-189.
- Chu FCS, Yip HK, Newsome PRH, Chow TW and Smales RJ (2002a). Restorative management of the worn dentition: 1. Aetiology and diagnosis. *Dental Update* 29: 162-168.
- Chu FCS, Siu AS, Newsome PRH, Chow TW and Smales RJ (2002b). Restorative management of the worn dentition: 2. Localised anterior tooth wear. *Dental Update* 29: 214 - 222.
- Chu FCS, Botello MG, Newsome PRH, Chow TW and Smales RJ (2002c). Restorative management of the worn dentition: 3. Localised posterior tooth wear. *Dental Update* 29: 267-272.
- Chu FC, Siu AS, Newsome PRH, Chow TA and Smales RJ (2002d). Restorative management of the worn dentition: 4. Generalised toothwear. *Dental Update* 29: 318 - 324.
- Dumfahrt H and Schaffer H (2000). Porcelain laminate veneers. A retrospective evaluation after 1 - 10 years of service: part II clinical results. *International Journal of Prosthodontics* 13: 9-18.
- Dyer K, Ibbetson RJ and Grey N (2001). A question of space: options for the restorative management of worn teeth. *Dental Update* 28: 118-123.
- Ganss C, Klimek J, Schaffer U and Spall T (2001). Effectiveness of two fluoridation measure on erosion progression in human enamel and dentine in vitro. *Caries Research* 35: 325-330.
- Gow AM and Hemmings KW (2002). The treatment of localised anterior tooth wear with indirect Artglass restorations at an increased occlusal vertical dimension. Results after two years. *European Journal of Prosthodontics and Restorative Dentistry* 10: 101-105.
- Hemmings KM, Darbar UR and Vaughan S. (2000). Tooth wear treated with direct composite restorations at an increased vertical dimension: results at 30 months. *Journal of Prosthetic Dentistry*. 83: 287-293.
- Hunter L and Stone D (1997). Supraoccluding cobalt chrome onlays in the management of amelogenesis imperfecta in children: a 2 - year report. *Quintessence International* 28: 15-19.
- Kilpatrick N and Mahoney E (2004). Dental erosion: Part 2. The management of dental erosion. *New Zealand Dental Journal* 100: 42 - 47.
- Larsen MJ (2001). Prevention by means of fluoride of enamel erosion as caused by soft drinks and orange juice. *Caries Research* 35: 229-234.
- Larsen MJ and Richards A (2002). Fluoride is unable to reduce the dental erosion from soft drinks. *Caries Research* 36: 75-80.
- Mahoney E and Kilpatrick N (2003). Dental erosion: Part 1. Aetiology and prevalence of dental erosion. *New Zealand Dental Journal* 99: 33-41.
- Millward A, Shaw L and Smith AJ (1994). Dental erosion in four year old children from differing socio-economic backgrounds. *Journal of Dentistry for Children*. 1994a; 61: 263-266.
- Milosevic A, Young P and Lennon MA (1994). The prevalence of tooth wear in 14-year old school children in Liverpool. *Community Dental Health*. 11: 83-86.
- Moynihan P (2002). Dietary advice in dental practice. *British Dental Journal* 193: 563-568.
- Nohl FS, King PA, Harley KE and Ibbetson RJ (1997). Restrospective survey of resin-retained case - metal palatal veneers for the treatment of anterior palatal tooth wear. *Quintessence International* 28: 7-14.
- O'Brien M. Children's dental health in the United Kingdom 1993. London HMSO. 1994.
- Pindborg JJ: Pathology of the Dental Hard Tissues. Copenhagen, Munksgaard, 1970, pp 312-321.
- Redman CDJ, Hemmings KW and Good JA. (2003). The survival and clinical performance of resin-based composite restorations used to treat localised anterior tooth wear. *British Dental Journal*. 194: 566-572.
- Reynolds EC (1998). Anticariogenic complexes of amorphous calcium phosphate stabilised by casein phosphopeptides: a review. *Special Care Dentistry* 18: 8-16.
- Rivera-Morales WC and Mohl ND (1991). Relationship of occlusal vertical dimension to the health of the masticatory system. *Journal of Prosthetic Dentistry* 65: 547-553.
- Shaw L and Smith AJ (1998). Dental erosion - the problems and some practical solutions. *British Dental Journal* 186: 115-118.
- Shen E, Cai F, Nowicki A, Vincent J and Reynolds EC (2001). Remineralisation of enamel and subsurface lesions by sugar free chewing gum containing casein phosphopeptide-amorphous calcium phosphate. *Journal of Dental Research* 80: 2066-2070.
- Smith BG, Bartlett DW and Robb ND. (1997). The prevalence, etiology and management of tooth wear in the United Kingdom. *The Journal of Prosthetic Dentistry* 78: 367-372.
- Watson IB and Tulloch EN (1985). Clinical assessment of cases of tooth surface loss. *British Dental Journal* 159: 144-148.
- Welbury RR (1991). A clinical study of a microfilled composite resin for labial veneers. *International Journal of Paediatric Dentistry* 1: 9-15.
- Wilson NM, Charette L, Thompson AH and Silverman M (1985). Gastro-oesophageal reflux and childhood asthma: the acid test. *Thorax* 40: 592 - 597

# Hypoplasia and the first permanent molar

## An orthodontist's perspective of the compromised first permanent molar

Orthodontic significance of the first permanent molar:

- First permanent tooth to erupt in the buccal segment. So, disruption to eruption or premature loss of the first molar can have a profound effect on the rest of the permanent buccal teeth.
- Major contributor to the buccal occlusal table.
- The basis of Angle's Classification of Malocclusion.
- Angle's Class I Occlusion is the "Gold Standard" for desired orthodontic result.
- Generally the largest tooth in the arch and most substantial root form: "buttress" or anchor tooth in orthodontic mechanics.

The compromised first permanent molar:

- Impaction
- Failure to erupt
- Hypoplasia of crown/root
- Gross caries
- Trauma

Mesial impaction of the first molar:

- Often degree of impaction worse than clinical appearance

■ Treatment options:

1. Leave – generally E will exfoliate
2. Disc distal of E (mild impaction)
3. Placement of wire separator (mild impaction)
4. Push molar distally – limited fixed appliances (severe impaction with resorption of distal root of E).

The hypoplastic and/or grossly carious first molar in the mixed dentition. Salient points in treatment planning:

- Stage of development
- Potential for crowding in permanent dentition
- Potential for malocclusion in permanent dentition
- Presence of second and third molars
- Viability of rest of the permanent dentition.

Conventional wisdom states that in cases where extraction of compromised **mandibular** first molar is contemplated, the extraction should be carried out by the time bifurcation development of the second molar root has occurred – generally around 8-9 years of age.

Several cases were shown where the compromised mandibular first molars were extracted much later at around 12 years of age, with more than two-thirds root formation of the second molars complete and third molar tooth germs evident. Complete space closure still occurred in these cases.

Extraction of the first permanent molar during fixed appliance treatment:

- Extraction of a sound first molar as tooth of choice is very rare except in some cases of anterior open-bite ("closing the wedge")
- When a molar extraction is preferred e.g. in profile considerations, the tooth of choice tends to be the second molar
- Anchorage demand is very high, when closing first molars space.
- This is especially so for mandibular space in Class II Div1 cases.

Several cases were shown illustrating the extraction of compromised first molars during comprehensive orthodontic treatment.

*Dr Tissa Jayasekera*



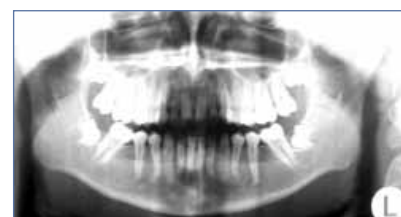
*Fig 1 Female aged 11.5 years – extraction of teeth 36 46*



*Fig 2 Complete space closure 2 years later*



*Fig 3 Female aged 12 years – extraction of teeth 36 46*



*Fig 4 Complete space closure 3 years later*

# The Colgate ANZSPD postgraduate student research competition

## Quality of life outcomes following dental treatment under general anaesthesia

Dr Heather Anderson, Dr Bernadette Drummond, Assoc Prof Murray Thomson  
University of Otago School of Dentistry

Studies in this area of dental research are very limited. Only 3 previous studies have assessed oral-health-related Quality of Life issues, with regards to children's complaints about their teeth, children's problems with eating and sleeping, and the possibility of negative behaviour. All of these studies however, have reported an improvement for these quality of life indicators. Previous New Zealand data on GA have been limited to reviews or audits of day-stay services. There have been no previous Australasian studies looking at the effect of ECC on children's quality of life, or general health and well-being, and no studies have addressed the wider impact this has on the family, including cost and time issues for the parents.

This study is a prospective assessment of the changes in oral-health-related quality of life for children and their families, following comprehensive dental care under GA. The objective of the study was to examine the treatment-associated change in the social impact of oral conditions among children (and their families) who were undergoing comprehensive

dental care (CDC) under general anaesthesia (GA).

**Study Design:** The parents or caregivers of a consecutive clinical sample of children receiving CDC under GA, at the University of Otago School of Dentistry and the Christchurch Oral Health Centre, were interviewed by telephone before and after the treatment. Questions were asked relating to the impact of the condition on the child and the family. The post-treatment questionnaire also sought information related to parental satisfaction with the care provided under GA.

**Results:** The parents/caregivers of 95 children participated in the study; 49 had treatment completed at the University of Otago School of Dentistry, and 46 were treated at the Christchurch Oral Health Centre. The child sample comprised 53 (55.8%) males and 42 (44.2%) females, with a mean age of 5.1 years. Their mean dmft was 8.2. 71% of the children lived in areas with no water fluoridation, and 84% came from low to medium socio-economic status. Only 20 children frequently had a fluoride mouthrinse or tablet, but 57%

of children had assistance with their toothbrushing. These numbers were consistent before and after treatment.

A consistent pattern of improvement in oral-health-related quality of life was found with each indicator used. Complaints of pain, problems with eating and sleeping, and behaviour concerns showed significant improvements, with 100% improvement for children for whom frequent pre-GA problems associated with eating, sleeping and behaviour were reported. Sixty-six parents had to arrange time away from employment on the day of the GA, and almost half of those incurred a loss of income. The majority of parents reported a high degree of satisfaction with the care received.

**It was concluded that treating young children with high disease experience in a single session under GA resulted in an immediate improvement in oral health and quality of life for children and their families; and providing oral rehabilitation for these children under GA appears to be an acceptable method for the majority of the parents/caregivers.**

## A clinical and molecular genetic study of oligodontia in three families

Malandris M<sup>1</sup>, Cameron AC<sup>2</sup>, Widmer RP<sup>1</sup>, Wilson MJ<sup>3</sup>, Bennetts B<sup>3</sup>, Christodoulou J<sup>3</sup>  
(mmal9885@mail.usyd.edu)

University of Sydney, NSW<sup>1</sup>, Paediatric Dentistry, Westmead Centre for Oral Health<sup>2</sup>, Western Sydney Genetics Program<sup>3</sup>

Definitively differentiating non-syndromic oligodontia (NSO) from various forms of ectodermal dysplasia (ED) can be a diagnostic challenge. Oligodontia is defined by Mendelian Inheritance in Man as agenesis of 6 or more teeth. NSO is any manifestation of oligodontia not associated with a syndrome or ED and has a reported prevalence of 0.08%-0.26% (Rolling & Poulsen, 2001). NSO is usually inherited as an autosomal dominant (AD) condition and several causative

genes have been identified, including *MSX1* (4p16.2), *PAX9* (14q13.3) and *He-Zhao* (10q11.2). ED, a primary defect of at least 2 of the 4 ectodermally derived tissues of hair, nails, sweat glands or teeth, comprises a large and complex group of inherited diseases (Freire-Maia & Pinheiro, 1984). The classic X-linked hypohidrotic ED has a reported prevalence of 1 in 100,000 births (Stevenson & Kerr, 1967). Recently, mutations in the *EDAR* gene (2q12.3)

have been linked to an AD (and autosomal recessive) form of hypohidrotic ED. The prevalence of this condition is unknown.

**Objectives:** To collect dental, genetic and dermatological information in several large pedigrees with autosomal dominantly inherited oligodontia in order to provide a definitive diagnosis of NSO or AD ED, to clinically differentiate affected from unaffected family members and to

screen the DNA extracted from collected blood samples from these patients for linkage to genes known to cause NSO or AD ED.

**Methods:** Clinical examination, hair sample analysis, clinical photographs, radiographs, study models and salivary function tests were undertaken. Blood samples were collected and the DNA extracted was used to conduct linkage analysis for the candidate genes of *EDAR* for the AD ED pedigrees and *PAX9* and *MSX1* for the NSO pedigrees. Linkage analysis measured the frequency with which a gene remained linked through meiosis to the disease and was calculated using a lod (logarithm of odds) score.

**Results:** Of the 26 subjects that participated, one AD ED pedigree and two NSO pedigrees were clinically diagnosed. Among the affected AD ED family members, anomalies in hair, teeth, nails and heat tolerance were

found to varying degrees. Hair strand anomalies under microscopic examination were seen particularly in the affected AD ED subjects. All subjects were within the normal range for the salivary function test. The degree of tooth agenesis was similar between the AD ED and NSO pedigrees, with most affected individuals missing between 6 and 14 teeth. Microdont premolars and incisors were more prevalent in the NSO pedigrees. AD ED subjects failed to develop relatively more upper lateral incisors, lower central incisors and second molars while NSO subjects failed to develop relatively more first premolars. Genetic linkage was excluded between the AD ED and NSO pedigrees and all respective candidate genes.

**Conclusions:** Definitive differentiation of NSO from AD ED depends on close collaboration with a clinical geneticist. Molecular genetic tests are still not a feasible method for confirmatory

diagnosis of conditions associated with oligodontia, other than for research purposes. This study showed that NSO can be differentiated from AD ED using clinical diagnostic methods but linkage to the currently identified candidate genes of these conditions was excluded. Further research is required into the molecular genetic causes of oligodontia.

#### References:

1. Rolling S, Poulsen S. *Oligodontia in Danish schoolchildren*. ACTA Odontol Scand 2001; 59:111-2.
2. Freire-Maya N, Pinheiro M. *Ectodermal Dysplasias: A Clinical and Genetic Study*. Alan R. Liss, New York, 1984.
3. Stevenson AC, Kerr CB. *On the distributions of frequencies mutations to genes determining harmful traits in man*. Mutat Res 1967;4:339-52.

*The winner of the Competition, Dr Juliette Scott, will publish her research in the next issue of Synopses*

## Presentation by the winner of the 2003 postgraduate essay competition

### Provision of oral care for children with malignancies

Yaso Ramadas

Paediatric Dentistry Postgraduate Student, University of Melbourne

Childhood malignancies are not common, but still represent the most common cause of disease related to childhood mortality. Treatment for these conditions has improved markedly with newer methods of diagnosis, staging and therapy resulting in more long-term survivors. Treatment of malignancies is typically undertaken in a multidisciplinary facility. Treatment modalities commonly used are chemotherapy, radiotherapy, surgery and bone marrow transplantation. As the therapies become more successful, the short and long-term effects on the normal tissues have also increased. Oral complications are common and may relate to the malignancy itself or may occur as a result of the treatment.

Appropriate oral care is essential for children with malignancies to reduce the morbidity associated with the cancer treatment and is divided into three stages: at the time of cancer diagnosis, acute care during cancer treatment and follow-up dental care. Initial screening is essential to eliminate potential causes of infection and mucosal irritation as well as provide preventive and palliative guidance. The aim during cancer treatment is to minimise the oral complications such as mucositis, infections and haemorrhage. Supportive treatment should be carried out in conjunction with the oncology team.

With improving prognosis for malignancies, patients are surviving longer and with the relatively new

phenomenon of late effects of treatment modalities now appearing. With children in particular, damage to the developing skeletal and dental tissues is an important issue. Close long-term follow-up is required to monitor growth and development and for the early detection of recurrences or new malignancies.

Therefore the team involved in the management of malignancies in children will need to expand to provide the patients not only with increased life expectancy, but also with improved quality of life.

*The entire Essay was published in Synopses, March 2004, Issue 28*



# 14th ANZSPD Conference Report 18 – 20 March 2004

The 14th ANZSPD Biennial Conference was held at the Melbourne Exhibition Centre (MEC) from 18 – 20 March 2004. Dr Stephen Fayle from Leeds Dental Institute UK was invited as the Colgate Keynote Speaker to address topical issues on the Conference theme “tomorrow’s teeth for toddlers, teens & in-betweens”. Stephen is a Consultant in Paediatric Dentistry at Leeds Dental Institute, and has had extensive clinical, teaching and research experience in paediatric dentistry, and has published a significant number of papers related to the Conference theme. He was complimented by expert speakers from Australia and New Zealand, including Professors Eric Reynolds, Louise Brearley and Nicky Kilpatrick, and Drs Angus Cameron, Bernadette Drummond, Tissa Jayasakera, Rob McDougall, Yaso Ramadas, Peter Readman, Margarita Silva, Nina Vasan, and Peter Wong. Cutting edged presentations addressed current key clinical issues in paediatric dentistry. Topics included the latest strategies in behaviour management, controversies in antibiotic prophylaxis, an update on preventive strategies, including research into mechanisms of remineralisation, fluoride revisited, diagnosis, prevention and management of dental erosion, and management of molar-incisor hypomineralisation, seemingly an increasing clinical problem. The Colgate postgraduate research award was won by Dr Juliette Scott for her research into “Establishment of a Primary Culture System for Human Odontoblasts”.

ANZSPD Executive Council met on Wednesday evening 17 March. An item of immediate importance resolved was concerning the soon to be introduced ANZSPD website. This is presently being trialed on a private website. Features include updating of membership lists and inclusion of items of interest forwarded electronically by provincial branch secretaries.

The Colgate sponsored Welcome Cocktail Reception was held on Thursday evening at the MEC in function rooms having a vista overlooking the Yarra and Southbank. Many of the 337 Conference registrants attended the Welcome Reception, and were entertained by “Wacky”, a band with an offbeat jazz flavour. On Friday morning the Conference was officially opened by Victorian Government Health Minister Hon. Bronwyn Pike, who was presented with flowers by children Ishaan Kotecha and Bridgette Sheahan, following a short thank you speech by Bridgette Sheahan. This was accompanied by introductory speeches from State and Federal Presidents, Mala Desai and Chris Olsen, and an initial collage of projected images of Melbourne highlights. The lecture programme was held in the well designed MEC Auditorium and supported by professional A-V assistance, combined to provide high quality audiovisual presentations over the 2 day continuing education programme.

A large Trade Display was supported by Exhibitors including A-dec Aust / Williams Dental, Ansell Healthcare, Colgate Oral Care, Dental Medical Technologies P/L, GC Asia, Gunz Dental, Halas Dental, Henry Schein Regional, HICAPS, Laser & Digital Aust, Medfin Aust P/L, Medifit – Design and Fitout, Oral B, and the Victorian Dept. of Human Services.

The Gala Dinner sponsored by 3M – ESPE was held on Friday evening from 7pm to midnight in the River Room of the Crown Casino, providing the ambience and vista of Southbank and incendiary displays held during the evening on the hour above the Southbank walkway. After MC John Sheahan completed formalities guests danced much of the evening away with contemporary dance music provided by the Di Faulkner Band. Many left reluctantly with much chatter, well after midnight when the band finished playing.

The Closing Ceremony held on Saturday afternoon featured a series of 150 images taken over the three days of the Conference, projected at 2 second intervals to remind us of the fantastic time that we all had experienced. This was followed by the ANZSPD Annual General Meeting for the ANZSPD members present. Feedback from the Conference has been most favourable. Successive ANZSPD Biennial Conferences consistently have become better attended and more professionally presented over time. This 14th Conference has been no exception. We look forward to a state of the art ANZSPD sponsored 3 day International Association of Paediatric Dentistry Conference at Darling Harbour, Sydney in November next year, 2005, followed by the 15th ANZSPD Biennial Conference hosted by the West Australian Branch in May 2007.

With more than 330 registrants at this 14th Biennial Conference it is now essential that the services of a quality Professional Conference Organiser are employed. My sincere thanks go to our Conference Organiser “Happenings Australia” for their assistance, with special thanks due to Karina Mielimaka and Kristen Bell. I also take this opportunity to thank the Victorian Branch Local Organising Committee members Mala Desai, Karen Kan, Jodie Heap, John Sheahan and Felicity Wardlaw for their support and hard work over the last 2 years, whom have made this most enjoyable ANZSPD event possible.

With warm regards,

*Chris Olsen*  
*Immediate Past President*

# ANZSPD – Branch News 2004

## New South Wales

The branch year started off with a bang for the NSW with many members attending the fantastic ANZSPD Biennial conference in Melbourne. The members found the conference to be very well organised and thoroughly enjoyable with informative scientific presentations and great social events. We are looking forward to the next time we can all get together in Sydney next year.

Our first local meeting will be held on 11 May where we are very happy to have two speakers; Professor Ali Darendeliler, Professor of Orthodontics at the University of Sydney and Dr Jim Papadopoulos a Sleep Paediatrician discuss the topic of 'Sleep Apnoea – Medical and Dental Implications'. The topics for the other meetings in 2004 have yet to be finalised but we are expecting to have an international or interstate speaker at one of these meetings.

The organising committee for IAPD Sydney 2005 is meeting regularly and finalising of the programme is continuing. The second announcement will be released in the next few weeks and if anyone would like any more information on IAPD 2005 you can access this on the website at: **www.iapd2005.com** or email: **Rebecca.deal@icmsaust.com.au**

*Erin Mahoney*

## South Australia

At the general meeting of the ANZSPD SA Branch on Monday 10 May 2004 Dr John Burrow was made an Honorary Life Member of the Society. This honor was bestowed on John in recognition of his contribution to Paediatric Dentistry in South Australia. He has had a long and distinguished career, which, in retirement, is by no means over.

Dr Burrow graduated B.D.S. in 1951 with distinction and commenced in private practice 1952. He restricted his practice to Children's Dentistry in 1962 and remained in private practice until 1975. From 1975 until his retirement in 1997 John worked in the School Dental Service.

John was responsible for many initiatives such as establishing a facility for the treatment of very young children under general anaesthesia at the Adelaide Dental Hospital. This became a teaching facility for undergraduate students and was later moved to the Adelaide Women's and Children's Hospital (AW&CH). John was appointed an Honorary Visiting Dentist to the AW&CH in 1964 and was subsequently appointed Visiting Paedodontist, retiring from this position in 1998.

Dr Burrow has worked in many facilities throughout South Australia offering specialist care for children. These include the Spastic Centre of South Australia, the Whyalla Hospital, Flinders Medical Centre and The Strathmont Centre for the Intellectually Disabled.

John's work in these areas was recognized officially in 1977 when he was awarded the Queen's Silver Jubilee Medal for Services to Dentistry, particularly the handicapped. Further recognition of his contribution to the dentistry came with his election as a Fellow of the International College of Dentists in 1998.

Since retiring in 1997, John has been far from idle. He has embarked on another career, becoming involved in various research projects in the Department of Dentistry at The University of Adelaide. He has been awarded ADRF research grants in 1998 and 2000 which have lead to the publication of a number of papers.

Dr Burrow has been a great advocate for Children and Children's Dentistry in Australia. He was a foundation member of the Australian Society of Dentistry for Children, which later became The Australian and New Zealand Society of Paediatric Dentistry.

Throughout his career John has been a great teacher as well as a clinician. He has been generous with his knowledge and has always encouraged others to take up the challenge Paediatric Dentistry provides. I, along with many others, would like to thank him for his dedication to Children's Dentistry and his invaluable contribution to the education of both undergraduate and postgraduate students in the Faculty of

Dentistry at The University of Adelaide.

At the meeting, Dr Dean Hewlett (current branch president) presented John with a commemorative certificate and a gift to mark the occasion. Also present to witness this presentation were John's wife, Joan and his eldest son.

*Sue Springbett*

## Victoria

Early 2004 has seen the Victorian Branch focus all its energy on the hosting of the 14th ANZSPD Biennial Conference. Our usual February and April Dinner meetings were not held this year as the Conference fell in between these two meetings. Now that the Conference has come and gone, and the final tidying up in its aftermath completed, the Branch Executive is now again focusing on future activities.

On Thursday 3 June 2004 our first Dinner meeting for the year was held at University House, University of Melbourne. The Dr Des Crack Prize was presented to the best 2003 final year student jointly in paediatric dentistry and special care dentistry. A short presentation was given by one of our Melbourne paediatric dentistry postgraduate students and this was followed by the main presentation for the evening by Melbourne orthodontist Dr Igor Lavrin entitled 'According to 60 Minutes, Orthodontists Ruin Faces, Fact or Fiction?' This controversial media topic generated much interest.

Two future Dinner Meetings are scheduled for August and October, again to be held in University House. The Victorian Branch Executive thanks ANZSPD members who attended the recent 14th Biennial Conference in Melbourne, and trusts that they found it was both an informative and enjoyable event in the usual ANZSPD tradition.

*Chris Olsen*

## Western Australia

The University of Western Australia has an annual Fellowship which is funded by a generous bequest from the estate of a prominent Western Australian dentist of the first half of the twentieth century, Dr Abraham Herman. The bequest is to fund visits to the School of Dentistry at the University by prominent dental clinicians, researchers and academics. This year, the recipient of the Fellowship has been Emeritus Professor Gerry Wright. Gerry, of course, is currently Secretary-General of the International Association of Paediatric Dentistry. Gerry and his wife, Nancy spent three weeks in Western Australia in late February and early March. In addition to participating in the under-graduate paediatric dentistry teaching programme, Gerry presented the eponymous A.J. Herman Lecture to a general audience and then he and Nancy were the guests of the WA Branch of ANZSPD at a dinner meeting.

In the A.J. Herman Lecture, Gerry chose to speak on international paediatric dental programmes in which he has been involved. This included the IAPD sponsored Dentists for all Children [DENFAC] project, where paediatric dentistry is promoted in mainly third world countries. He spoke of how Poland, Turkey and Romania have participated in 2003. He also spoke about Operation Belarus, where his University, the University of Western Ontario in Canada had established a link with a dental school in Belarus, with the plan of enhancing the teaching of paediatric dentistry at the eastern European school. Finally, he spoke on the qualifying teaching programme the University of Western Ontario had set up for overseas trained dentists who had migrated to Canada. In all three projects, the spirit of co-operation, which had been engendered between, in effect, dentists of the first and third world, projects that have empowered the recipients without being patronising, was commendable. Those in attendance enthusiastically received the lecture.

The Wrights were Guests of Honour at the special dinner meeting of the ANZSPD WA Branch. This meeting was held at the Matilda Bay Restaurant, a restaurant occupying a perfect position on the banks of the



*Left to right: Professor Paul Abbott (Professor of Clinical Dentistry and Head, School of Dentistry at the University of Western Australia and Director of the Oral Health Centre of WA), Professor Gerald Wright and Dr Alistair Devlin*

Swan River, adjacent to both the University of Western Australia and the Royal Perth Yacht Club and commanding a view over the river and beyond Kings Park to the Perth CBD. That the weather of the night was also perfect helped the occasion, but then to be treated to a great meal and a terrific after dinner talk on Canadian Aboriginal Art, presented by both Gerry and Nancy made for a complete evening. The Aboriginal art from areas around Hudson Bay is of relatively recent origins, and the examples presented were principally from their own collection.

Branch President, Dr Tim Johnston represented the Society at the Faculty of Medicine and Dentistry of the University of Western Australia Annual Prize Giving Ceremony on 24 February 2004. This event was held at the impressive Lawrence Wilson Art Gallery on the Crawley Campus of the University. Dr Johnston had great pleasure in presenting the 2003 ANZSPD Undergraduate Prize to Robert Hamilton; unfortunately, Margaret Shim was to have been presented with the Federal ANZSPD Undergraduate Essay Competition Prize, but she was unable to attend the Ceremony.

The next meeting of the Branch will be

the not-to-be-missed Annual Mid-Winter Meeting. In 2003, the meeting was held in the wheatbelt town of York, but this year it will return to the south west of the state. The venue will be the brand new Quay West Resort at Bunker Bay, which is quite close to Cape Naturaliste, on the north end of the Margaret River wine region. Even better will be the presence of two interstate guest lecturers, Dr Erin Mahoney and Dr Sam Gue. This meeting will be on the weekend of the 31 July.

*Alistair Devlin*

## New Zealand

The NZ branch was very grateful to the hospitality conferred to us with the Melbourne Conference. The programme was also very commendable.

Dr Heather Anderson recently gained her MDS in paediatric dentistry. She will be based in Christchurch.

On a political note the issue of independent practice for dental therapists is currently being debated.

*MaryAnne Costelloe*



## ANZSPD Federal Secretary-Manager's Report

The Federal Council of ANZSPD met in Melbourne prior to the 14th Convention, and then the General Meeting of the Society was held at the conclusion of the Convention.

From the Council Meeting:

- Election of Office Bearers.
  - President: Dr John Winters.
  - Vice President: Dr Callum Durward.
  - Secretary-Manager: Dr Alistair Devlin.
- The meeting was addressed at length on behalf of the Local Organising Committee for the 20th IAPD Congress in Sydney in 2005 by the LOC Chairman, Dr Richard Widmer and Ms Rebecca Deal of ICMS Australasia Pty Ltd [the Professional Conference Organisers]. A comprehensive and favourable report was received on the progress of this important event.
- Dr John Winters was able to report on the considerable progress being

made in the establishment of the ANZSPD website. The 'assistance' provided by John's son, Ryan, was duly acknowledged!

- Dr Sue Springbett reported on the 2005 Australian Dental Association Congress to be held in Adelaide in March of 2005. Despite a theme of 'Generations in Dentistry', at the time of the Council meeting, there did not appear to be much if any paediatric content. Sue was going to make strong representations to rectify this!
- A past ANZSPD President, Dr Joe Verco drew the attention of the Council to noises being made by the Australian Federal Government about increasing funding for their various programmes e.g. Veterans Affairs, Aboriginal Health Services, Cleft Lip and Palate scheme, etc. His observation that the timing was probably right for representations to be made by ANZSPD to the Minister for Health and the Minister for Ageing about funding, especially for Cleft Lip and Palate

and other syndrome patients, was agreed by the Council. It was noted that ANZSPD had made approaches in the past, and it was agreed to make the necessary approaches once again.

- The 15th ANZSPD Convention is to be held in Western Australia. By the Federal Constitution, this should be held between March 2006 and March 2007. The WA Branch had determined that May was probably the best month to hold the Convention, but that May 2006 was probably too soon after the IAPD Congress in 2005 in Sydney for this to be a success. Accordingly, it was agreed that the period for the next Convention be extended until May 2007. The Convention will probably be held in that month. The Branch will now have the big decision to make – to hold the Convention in Broome or in Fremantle. Canvassing of people attending the Melbourne Convention seemed to favour Broome.

*Alistair Devlin*

## Recent visit by Dr Monika Suorn from Cambodia

The Australasian Academy of Paediatric Dentistry and ANZSPD hosted a dentist from Cambodia, Dr Monika Suorn.

Monika is a professionally trained dentist from Cambodia, and over the past 2 years has been completing a diploma in paediatric dentistry at the University in Phnom Penh. This program has been set up by one of our colleagues, Dr Callum Durward of New Zealand.

Monika runs a dental clinic within an orphanage in Phnom Penh, and she also works in a number of provinces treating very poor patients. As a guest of the Academy she spent time in Melbourne observing a number of private Paediatric dentistry practices, and observed the clinics and teaching facilities at the University of Melbourne. She also attended our Academy meeting and the ANZSPD meeting in Melbourne. She gave a wonderful PowerPoint presentation, detailing the trials and tribulations of dentistry within Cambodia. Given the

fact that Monika has very poor English, and was quite nervous, she did present extremely well and gave us all an insight into how dentistry has improved since the Pol Pot era.

After spending time in Melbourne, Monika then travelled to Canberra to spend time with an orthodontist, a periodontist and a paediatric dentist.

Prior to returning back to Cambodia, Monika stopped by in Sydney and had a quick look at the dental hospital.

Monika certainly seemed to enjoy her trip to Australia and hopefully she will have everlasting memories of her time in Australia.

I would like to thank all of those involved with Monika and her time in Australia. She certainly did enjoy her time here and was overwhelmed by our generosity and kindness.

*Peter Wong*





## 'Uniting Globally for Children'

IAPD Congress, New Orleans USA, 15-19 October 2003

*Photographs courtesy of Heather Anderson*



Left: a group photo of some of the Australasians who attended the IAPD conference in New Orleans, after a run around on the basketball court (for some), and mild entertainment for the other supportive spectators.



Right: a night out in New Orleans – a jazz bar on the famous Bourbon Street.



Left: dressed up for the 'Mardi Gras' themed gala dinner are: Bernadette Drummond and her daughter Tania, Alison Meldrum, Heather Anderson and Goran Dallhof. A great time was had by all.

# 20th International Congress of the

## International Association of Paediatric Dentistry

Sydney Convention & Exhibition Centre • Sydney Australia    **October 31 – November 5, 2005**



**Frontiers of Paediatric Dentistry**

Sydney's magnificent Harbour, renowned Opera house and sunny beaches combine to make Sydney a unique and memorable destination for the 2005 IAPD Congress – only the second time in the Association's history the congress has been held in the Southern Hemisphere!

As Professionals involved in providing Paediatric Dental Care, you cannot afford to miss this opportunity to participate in an interactive forum on contemporary oral health care for children. The program will encompass important components that reference new and innovative advances in the field of Paediatric Dentistry.

Our International and Local panel of speakers look forward to sharing and exploring current ideas and bringing together the breadth of experience represented by our worldwide membership.

For further information, please visit [www.iapd2005.com](http://www.iapd2005.com)

**www. iapd2005.com**



## 31st AUSTRALIAN DENTAL CONGRESS & EXHIBITION

3 – 7 MARCH 2005

**GENERATIONS IN DENTISTRY**

Adelaide Convention and Exhibition Centre – Adelaide, Australia

[www.ada2005.com](http://www.ada2005.com)

### REGISTRATION NOW AVAILABLE

Don't miss the early bird registration special. Register online ([www.ada2005.com](http://www.ada2005.com)) or contact the Congress Managers for a copy of the registration brochure.

### SCIENTIFIC PROGRAM

International and local lecturers of eminence in their fields will discuss topical issues, current and prospective treatment philosophies and emerging technology. See the website for further updates and details on the Program.

### SOCIAL PROGRAM / ACCOMPANYING PERSONS' PROGRAM / SPORTS DAY

An exciting optional Social and Accompanying Persons' Program is available to delegates include the Gala Dinner Dance at Adelaide Oval; Wine Master Classes at Penfolds Magill Estate; Tours; and sporting activities.

### ACCOMMODATION IN ADELAIDE

A wide range is available to suit the budget of all delegates. See the website for available options. The official Congress Hotel is the Hyatt Regency Adelaide and is located immediately adjacent to the Convention Centre.

### SPONSORSHIP

Sponsorship opportunities are still available. Don't miss this exciting opportunity. Contact the Congress Managers now to secure your package and to profile your company.

### ADIA INDUSTRY EXHIBITION

The ADIA Industry Exhibition will be held in conjunction with the Congress. For further information on the Exhibition, contact Mr Duncan Campbell (Australian Dental Industry Association) on 02 9319 5631 or [adia@adia.org.au](mailto:adia@adia.org.au)

**Register online TODAY! [www.ada2005.com](http://www.ada2005.com)**

or contact Congress Managers for further information

GPO Box 128, Sydney NSW 2001, AUSTRALIA

Tel: + 612 9248 0800 Fax: + 612 9248 0894

E-mail: [ada2005@tourhosts.com.au](mailto:ada2005@tourhosts.com.au)



## Colgate® Corner

by Dr Jackie Robinson  
Colgate Professional  
Relations Manager



### Off to the 'Big Apple'



Many of you would be aware that Brian Howard (pictured above) has left Australian shores for the Big Apple. Brian has been appointed to the position of Director, Professional Products and Business Development and is working for Colgate at a global level. In his new position Brian is responsible for integrating Colgate's broad range of professional products into Colgate subsidiaries around the world. Along with Michael Bubb and Lenore Tuckerman, Brian was instrumental in developing the Colgate professional oral care business in the South Pacific Region from the early 90's and became one of the best known faces of Colgate with the dental profession. Within Colgate, we will continue to work closely with Brian in his new role.



The good news is that Lenore Tuckerman is still here! Lenore is busier than ever and is now coordinating the Colgate *Bright Smiles Bright Futures* school

education program in both Australia and New Zealand. This year Lenore introduced new *BSBF* materials for preschools and they have taken off like hot cakes (or should I say like Krispy Kremes)! And there is more exciting news for 2005! New materials for Year 3 classrooms, featuring a female colleague for Dr Rabbit – Dr Brushwell. The new Year 3 *BSBF* kits will be available from March 2005.

### New Colgate Professional Relations Manager for New Zealand



We are very happy to announce the appointment of Colgate's new Professional Relations Manager for New Zealand, Dr Barbara Shearer. Barbara is based

in the Colgate office in Christchurch Wednesdays-Fridays.

As Professional Relations Manager, Barbara is responsible for managing the broad range of sponsorships Colgate offers to support the dental profession in New Zealand.

## The Colgate® Sales Team

### New South Wales

Nolene Devery, Sales Manager for NSW/Qld 0419 998 515  
Tanya Brown 0410 488 581  
Louise McAllister 0419 993 700

### Queensland

Barbara Whitford 0417 642 665  
Narelle Bird (part-time) 0413 536 077

### South Australia

Robert Klatowsky 0412 119 777

### Tasmania

Janine Vincent, Sales Manager for Vic/Tas/SA 0417 592 499

### Victoria

Janine Vincent 0417 592 499  
Jo Stoney 0417 598 170

### WA/NT

Karin Guder, Sales Manager for WA/NT 0417 400 027

### New Zealand

Kim Austin, Sales Manager for New Zealand 027 275 2298  
Glenda McKenzie 027 537 2992  
Sarah Blakey 027 245 8190

In Australia, orders for Colgate products are placed through Halas Dental:

Telephone: 1300 658822  
Fax: 1300 658810

In New Zealand, orders for Colgate products are placed through Shalfoon Dental:

Telephone: 0800 808 855  
Fax: (09) 3781 158

The Colgate team of Territory Managers is here to assist you with the products you need in your surgeries.

## Colgate

is very proud to be  
the principal  
sponsor of the  
IAPD Congress  
2005



## Coming events

### ■ 3-7 March 2005

31st Australian Dental Congress  
Adelaide Convention Centre  
<http://www.ada2005.com>

### ■ 26-30 May 2005

58th American Academy of Pediatric  
Dentistry (AAPD) Annual Session  
Walt Disney World Dolphin,  
Orlando, FL  
[www.aapd.org/events](http://www.aapd.org/events)

### ■ 31 October – 5 November 2005

20th International Association  
of Paediatric Dentistry (IAPD)  
Congress  
Sydney Convention & Exhibition  
Centre  
[www.iapd2005.com](http://www.iapd2005.com)

## AUSTRALIAN AND NEW ZEALAND SOCIETY OF PAEDIATRIC DENTISTRY

### Federal President

Dr John Winters  
Chairman, Dental Department  
Princess Margaret Hospital  
Roberts Road  
Subiaco WA 6008  
Email: [jwinters@swiftdsl.com.au](mailto:jwinters@swiftdsl.com.au)

### Federal Secretary Manager

Dr Alistair Devlin  
57 Burroughs Road  
KARRINYUP WA 6018

### Branch Executives

Branch	President	Secretary	Federal Councillor
NSW	Dr Soni Stephen	Dr Erin Mahoney <a href="mailto:emah0137@mail.usyd.edu.au">emah0137@mail.usyd.edu.au</a>	Dr Kareen Mekertichian
Qld	Dr Laurie Bourke	Dr John Rutar <a href="mailto:jrutar@aol.com">jrutar@aol.com</a>	Dr Kerrod Hallett
SA	Dr Scott Smith	Dr Sue Springbett <a href="mailto:drsue@ozemail.com.au">drsue@ozemail.com.au</a>	Dr Vicki Farmer
Tas	Dr Tasha Dodd	Dr Wayne Ottaway	Dr Tasha Dodd <a href="mailto:aphcrane@netspace.net.au">aphcrane@netspace.net.au</a>
Vic	Dr Mala Desai	Dr Jodie Heap <a href="mailto:jlheap@bigpond.net.au">jlheap@bigpond.net.au</a>	Dr Chris Olsen
WA	Dr Tim Johnston	Dr Alistair Devlin <a href="mailto:devlins@inet.net.au">devlins@inet.net.au</a>	Dr John Winters
NZ	Dr Callum Durward	Dr Mary Anne Costelloe <a href="mailto:maryannecos@xtra.co.nz">maryannecos@xtra.co.nz</a>	Dr Callum Durward

### Editor Synopses

Dr Karen Kan

### Correspondence Synopses

Karen Kan  
The Editor, Synopses  
138 Harp Road  
Kew VIC 3101  
AUSTRALIA

### Printing and Distribution

**Colgate®**

Colgate Oral Care  
Level 15, 345 George Street  
Sydney NSW 2000  
AUSTRALIA

### Mailing List

The mailing list for the distribution of Synopses is maintained by Dr John Winters on behalf of the Federal Secretary/Manager of ANZSPD. It is compiled from information supplied by the Branch Secretaries. If there are errors in your mailing details, please contact Dr John Winters or your Branch Secretary. DO NOT contact Colgate for address correction.

### Submissions

All text for inclusion in Synopses must be submitted to the editor on floppy disk, zip disk, CD, or by email. Both PC and Mac formats are accepted. Media will not be returned. Address email to [karenkan@optusnet.com.au](mailto:karenkan@optusnet.com.au). Please enclose your contact details and email address with all submissions.

### Deadline next issue

5 November 2004